

STORMS AND WEATHER WARNINGS

WASHINGTON FORECAST DISTRICT

The weather of the month taken as a whole was rather active, being characterized by numerous developments particularly along the middle Atlantic coast.

Advises were issued the morning of the 1st for strong east winds on the Atlantic coast from Delaware Breakwater to Eastport, in connection with a secondary disturbance of increasing intensity over the south Atlantic coast.

At 1:25 p. m. on the 5th when a disturbance of moderate intensity was over eastern North Carolina, warnings were disseminated for increasing easterly winds with overcast weather and rain from Delaware Breakwater to Portland, Me. On the following morning advises were issued for strong winds and gales off the coast from Hatteras to Eastport. Strong winds occurred on the coast from Cape Henry to Hatteras and probably off the middle and north Atlantic coast, although vessel reports are not available to verify this.

When a disturbance was over Hudson Bay on the evening of the 10th, warnings were issued for strong southwest winds on the following day from Sandy Hook to Portland. No verifying velocities were reported but fresh to strong winds occurred.

With a disturbance over the middle Mississippi Valley on the afternoon of the 13th moving rapidly east-northeastward, advisory warnings were ordered for the Atlantic coast from Sandy Hook to Eastport for increasing east winds becoming strong late that night or the following day. This was supplemented on the following morning by the dissemination of southwest storm warnings from Delaware Breakwater to Eastport and on the afternoon of that date warnings were extended southward to Southport, N. C. Strong winds occurred as indicated.

On the morning of the 17th a disturbance of slight but increasing intensity was over North Carolina and moving northeastward, and advises were issued for increasing east winds, Delaware Breakwater to Boston. While this disturbance did not cause strong winds on the immediate coast, vessel reports indicate that strong winds occurred some distance off the coast.

The evening radio bulletin for the north Atlantic coast, issued on Wednesday the 18th, indicated "Increasing southeast shifting to south and southwest winds, becoming strong Thursday night." The disturbance that was over Indiana moved rapidly northeastward by the morning of the 19th, and winds had increased along the northern New Jersey and the Long Island coasts. Storm warnings were immediately ordered from Hatteras to Eastport for strong southwest shifting to west winds with squalls, and strong winds occurred during the day. The warnings were lowered at 10 p. m. of the 19th.

On the morning of the 27th, when a disturbance was over Hudson Bay with a trough extending southward to Georgia, advisory warnings were disseminated for the Atlantic coast from Hatteras to Eastport for fresh south and southwest winds shifting to northwest with squalls. During the afternoon special observations indicated that the disturbance was increasing in intensity and northwest storm warnings were ordered displayed from Cape Hatteras to Provincetown, Mass. The evening of that date southeast warnings were ordered north of Provincetown to Eastport, Me. Strong winds and gales occurred substantially as indicated in the warnings.

With a disturbance off Nantucket on the morning of the 31st apparently increasing in intensity and moving

northward, warnings were ordered from Sandy Hook to Eastport. While the disturbance increased in intensity and moved northward as anticipated, winds did not reach dangerous velocities, as shown by the coast stations.

On the afternoon of the 31st a disturbance of small diameter developed over the South Atlantic States, being central on the evening of that day over eastern Georgia and storm warnings were ordered from Norfolk to Charleston. Winds were strong along the South Carolina coast during the night, but having diminished by the following morning the warnings were ordered down.

Frost warnings were issued for portions of the east Gulf and South Atlantic States on the 1st, 2d, 5th, 6th, 15th, 19th, 27th, 28th, and 30th; and for the Ohio Valley and Tennessee on the 27th, 28th, and 30th. On the 16th and 29th cloudiness prevented the occurrence of frost in portions of the States indicated in the warnings.—*R. H. Weightman.*

CHICAGO FORECAST DISTRICT

The monthly mean temperature was considerably above the seasonal normal over the entire forecast district; and, while a cold wave was quite general during the first few days of the month, mild weather was almost the rule thereafter, there being few lapses to lower temperature. Cold-wave warnings were issued on the 1st for the areas affected, but other cold-wave warnings during the month were for quite limited localities.

Storms on Lake Michigan.—Rather strong winds prevailed on Lake Michigan on a few occasions, and advisory messages were sent to open ports where navigation was maintained.

Frost warnings.—No warnings of frost were issued, except for Kansas, where service was begun on the 18th, and to the strawberry growers of southwestern Missouri, warnings being sent to the latter on March 18, 19, and 26.

The most prominent meteorological features of the month were the destructive tornadoes which occurred in the extreme southern portions of Indiana and Illinois and southeastern Missouri on the 18th. Rains and strong shifting winds were predicted for this area, but following the practice of the Bureau, no forecast for tornadoes was made.

Special forecasts were continued each Monday to certain fruit exchanges in the State of Washington covering the area over the Middle States for the protection of apples in transit, and these advises were discontinued for the season on March 23. The following letter was received from the Northwestern Fruit Exchange, Wenatchee, Wash.:

We wish to take this opportunity of thanking you most sincerely for the service you have given us during this shipping season.

We are endeavoring in every way possible to handle the transportation of our Northwestern apples with the least possible loss. The service that you have given us has enabled us in a great many instances to prevent loss by placing shipments under the proper protective service.

Other special forecasts and warnings were issued at different times to various interests in the district, covering the shipment of perishable goods.—*H. J. Cox.*

NEW ORLEANS FORECAST DISTRICT

Moderate weather conditions prevailed over this district during the month. Cold-wave warnings were issued on the morning of the 13th for Oklahoma, extended at night over the northwest portion of East Texas and were extended on the morning of the 14th over Arkansas, the